PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket No.: P179 1130.1

I. Introduction

Claims 1-4, 6-9, 11-13 and 15-18 are pending in this application and stand rejected as allegedly being obvious over various combinations of three or more references. Applicant respectfully requests a pre-appeal brief review of the outstanding final rejection dated January 14, 2008 in the instant application. Namely, the following rejections are being asserted:

- 1. Claims 1 4, 6 12, 15 and 17 stand rejected as unpatentable under 35 U.S.C. § 103(a) over Hammer et al. (US 5,501,886) in view of Borodaev et al. (WO 02/078455) with evidence by Hammer et al. (US 4,529,634).
- 2. Claims 13 and 16 stand rejected as unpatentable under 35 U.S.C. § 103(a) over Hammer et al. '886 in view of Borodaev et al. and Crevasse with evidence by Hammer et al. '634.
- 3. Claim 1 stands rejected as unpatentable under 35 U.S.C. § 103(a) over Hammer et al. '886 in view of Borodaev et al. and Crevasse with evidence by Hammer et al. '634.
- 4. Claim 18 stands rejected as unpatentable under 35 U.S.C. § 103(a) over Hammer et al. '886 in view of Borodaev et al. '455 with evidence by Hammer et at. '634.

No amendments to the claims were presented in the after-final response dated March 14, 2008. The Examiner issued an Advisory Action on March 28, 2008. Applicant submits the present Pre-Appeal Brief Request contemporaneously with a Notice of Appeal within three months of the Final Office Action dated January 14, 2008. Claims 1-4, 6-9, 11-13 and 15-18 are patentable over the references cited for at least the reasons set forth below.

There are two independent claims pending in this application, namely claims 1 and 18. Both claims, as well as all claims dependent thereon, are directed to a food casing that is formed from units of vinylpyrrolidone and units of at least one comonomer, the comonomer being selected from the group consisting of vinyl alkanoate, vinyl alkyl ether, conjugated alkadiene, acrylamide and α,β -ethylenically unsaturated carboxylic acid. The copolymer is in admixture with cellulose hydrate.

The following two issues are in dispute: (i) whether the references being relied upon by the Examiner teach or suggest "units of vinylpyrrolidone and units of at least one comonomer, the comonomer being selected from the group consisting of vinyl alkanoate, vinyl alkyl ether, conjugated alkadiene, acrylamide and α,β -ethylenically unsaturated carboxylic acid," and (ii) whether any of the references teach or suggest "a seamless food casing being a length of 5 to 100 m." Applicant

respectfully submits that after reviewing the below discussion, the panel will agree with Applicant and determine that the instantly pending claims are patentable over the references being relied upon by the Examiner.

II. The final rejections of claims 1-4, 6-12, 15 and 17 are improper (rejections 1, 3 and 4 above) because the references being relied up by the Examiner fail to teach or suggest "units of vinylpyrrolidone and units of at least one comonomer, the comonomer being selected from the group consisting of vinyl alkanoate, vinyl alkyl ether, conjugated alkadiene, acrylamide and α,β -ethylenically unsaturated carboxylic acid."

The Examiner contends that the proffered combinations of references suggest the claimed comonomer comprising unsaturated carboxylic acids. Applicant respectfully disagrees. Claim 1 and the rejected claims dependent thereon are patentable over Hammer et al. '886, Borodaev et al. and Hammer et at. '634 because, contrary to the Examiner's assessment as stated on page 1, paragraph 5 (referring to the Office Action dated September 4, 2007) of the Final Rejection, Hammer et al. '886 do not teach or suggest a copolymer comprising "unsaturated carboxylic acids" but, instead, teach copolymers comprising esters. Specifically, Hammer et al. '886 only disclose "unsaturated carboxylic acids of the formula IV" (see col. 5, 1l. 19-26) which, upon a close evaluation, are actually esters and not unsaturated carboxylic acids. In support, Applicant points to the definition R⁷ in formula IV which is. among other things, a trialkyl-ammonium radical, but not a hydrogen atom which would have resulted in an unsaturated carboxylic acid. This rationale also applies to Hammer et al. '886 column 5, lines 52 - 54 which is an exact repetition of the disclosure provided in lines 19 - 26 of column 5. According to Hammer et al. '886, the radical R⁷ is a "trialkyl-substituted ammonium radical." The R⁷ definition must recite hydrogen in order for formula IV to recite an unsaturated carboxylic acid as required in claim 1. For at least this reason alone, the rejection based on Hammer et al. '886 is improper because Hammer et al. '886 is not available as a reference under 35 U.S.C. §103(a) since Hammer et al. '886 does not teach or even suggest an unsaturated carboxylic acid as recited in claim 1.

Furthermore, even if Hammer et al '886 had disclosed the claimed comonomer (which Applicant does not agree), a person of ordinary skill in the art would not have been motivated to substitute the copolymers of Hammer et al. '886 with the hydrophilic homo- or copolymers of Borodaev et al. in a cellulosic casing. The teaching of Borodaev et al. is limited to polyamide casings comprising such a copolymer, not a copolymer in *admixture* with cellulose hydrate. In fact, Borodaev et al. do not contemplate cellulosic casings or casings containing any cellulosic material. Polyamide films and cellulosic films show completely different properties and are intended for different purposes.

Therefore, based on these differences, a person of ordinary skill in the art thus would not have been motivated to even look to Hammer et al. '886 much less substitute the copolymers of Hammer et al. '886 with the hydrophilic homo- or copolymers of Borodaev et al. in a cellulosic casing.

Furthermore, the cellulosic casing as disclosed by Hammer et al. '886 is not comparable with the cellulosic casing of Hammer et al. '634 and thus the teachings of these references cannot be combined as relied upon by the Examiner (see page 3 of the Office Action dated September 4, 2007). First, Hammer et al. '634 do not disclose copolymers comprising units of vinylpyrrolidone monomer as required in claim 1. Secondly, Hammer et al. '634 disclose a tubular food casing based on cellulose having a coating applied to its outside (col. 3, 1, 30). The coating is made up of elastic, non-adhesive copolymers, preferably of copolymers having units of (meth)acrylic acid, (meth)acrylates or vinyl alcohol esters (col. 4, l. 4 - 29). The copolymers are not "in admixture with cellulose hydrate" in the casing as required by claim 1. In the cellulosic casing of Hammer et al. '886, the ester of formula IV is incorporated in the cellulose matrix, and is not coated on the surface in a subsequent step, as in Hammer et al. '634. One of ordinary skill in the art would realize that units of vinylpyrrolidone increase the water-solubility of the copolymer and thus, would not be used as a coating applied to the outside of a cellulosic casing. Thus, the copolymers of Hammer et al. '634 are not identical with the copolymers of Hammer et al. '886 and were used for different purposes. Thus, one of ordinary skill in the art would not have looked to or even considered the teaching of Hammer et al. '634 to be instructive regarding a composition to be incorporated in the cellulose matrix of Hammer et al. '886.

For the reasons set forth above, the rejections (1, 3, 4) are improper because none of the references, alone or in combination teach or suggest "units of vinylpyrrolidone and units of at least one comonomer, the comonomer being selected from the group consisting of vinyl alkanoate, vinyl alkyl ether, conjugated alkadiene, acrylamide and α,β -ethylenically unsaturated carboxylic acid" as recited in claims 1 and 18.

III. The final rejection of claim 13 (rejection 2 above) is improper because none of the cited references teach or suggest a food casing with the recited length shirred to form a shirred stick or a sausage comprising the food casing of claim 1.

Claim 13 depends from claim 1 and recites a food casing as claimed in claim 1 having a length from 5 to 100 m. The casing is shirred to form a shirred stick. The rejection of claim 13 is improper because the combination of references do not teach or suggest the length of the food casing as recited in claim 13.

Crevasse discloses a shirred one-piece casing article formed from a fiber-reinforced cellulose casing (col. 2, l. 48 - 53). The casing has typically a length of 40 to 60 inches, but no more than about 70 inches, i.e. no more than about 1.78 m (col. 3, l. 51 - 56). The article is additionally surrounded by a sleeve (see Fig. 5). There mere fact that Crevasse could be modified does not make the modification obvious unless Crevasse suggests the desirability of the modification. See *In re Gordon*, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984). Simply being capable of modification is not enough to establish obviousness. See *In re Mills*, 916 F.2d 680, 682, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990). Therefore, any combination of the teachings of Hammer et al. '886 with those of Borodaev et al., Hammer et al. '634 and Crevasse does not amount to a teaching or suggestion of the shirred stick of claim 13. Therefore Applicant submits that none of the references being relied on discussed in section II supra, nor Crevasse teach or suggest a food casing of the claimed length recited in claim 13. Thus the rejection of claim 13 is improper for this further reason articulated in section III.

IV. Conclusion

In summary, rejections 1, 3 and 4 (above) as set forth in the final Office Action dated January 14, 2008, are improper because each and every claim requires a copolymer and comonomer combination as recited in claims 1 and 18. None of the references cited by the Examiner teach or even suggest the food casing of the rejected claims. The rejection is also improper because one of ordinary skill in the art would not have even looked to the cited references, much less have modified the teachings of the references to arrive at the claimed invention. Rejection II is improper and must be withdrawn because the combination of references do not teach or suggest the length of the food casing as recited in claim 13.

For the reasons set forth herein, Applicant respectfully requests that each of the rejections 1-4 be withdrawn.